

# Power Cost Memorandum Fuel Cost Update

Date: **November 4, 2021**

|                                                               |                                       |                                        |
|---------------------------------------------------------------|---------------------------------------|----------------------------------------|
| Utility Name (Cert. No.)<br><b>Naterkaq Light Plant (365)</b> | Utility File No.<br><b>PC10-0617N</b> | Date Filed:<br><b>October 21, 2021</b> |
|---------------------------------------------------------------|---------------------------------------|----------------------------------------|

| PCE AMOUNT<br>SUMMARY                                                                                                                                                                            | Previously<br>Approved<br>PC10-0617M  | Staff Recommended Amount(s)<br>and Effective Date<br>PC10-0617N |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------|
| Class<br>Rate                                                                                                                                                                                    | <u>Date Approved:</u><br>July 2, 2021 | November 5, 2021                                                |
| Residential                                                                                                                                                                                      | \$0.2325                              | \$0.2503                                                        |
| Community                                                                                                                                                                                        | \$0.2325                              | \$0.2503                                                        |
| <input type="checkbox"/> Interim <input checked="" type="checkbox"/> Permanent <span style="float: right;"><input type="checkbox"/> Interim <input checked="" type="checkbox"/> Permanent</span> |                                       |                                                                 |

|                                                                              |                                                                              |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Prior Fuel Purchase Price: <u>\$3.0007</u>                                   | New Fuel Purchase Price: <b>\$ 3.2239</b>                                    |
| <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Weighted | <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Weighted |
| Delivery Charge: _____                                                       | Surcharge Change: Previous _____ Updated _____                               |

| Weighted Average Fuel Price/Gal. Calculation |                |   |              |   |  |                |           |  |  |
|----------------------------------------------|----------------|---|--------------|---|--|----------------|-----------|--|--|
|                                              | <u>Gallons</u> |   | <u>Price</u> |   |  |                |           |  |  |
| On-hand before deliv                         | 16,578         | X | 3.0007       | = |  | 49,746         |           |  |  |
| Delivered                                    | 45,856         | X | 3.3045       | = |  | 151,531        |           |  |  |
|                                              | <u>62,434</u>  |   |              |   |  | <u>201,277</u> | Weighted  |  |  |
|                                              |                |   |              |   |  |                | Average   |  |  |
|                                              |                |   |              |   |  |                | \$ 3.2239 |  |  |

Signed: Brenda Cox  
Brenda Cox

Utility Financial Analyst

**Commission decision re. this recommendation :**

|          | Date (if different<br>from 11/4/21) | I<br>CONCUR       | I DO NOT<br>CONCUR | I WILL WRITE<br>A DISSENTING<br>STATEMENT * |
|----------|-------------------------------------|-------------------|--------------------|---------------------------------------------|
| Pickett  |                                     | <u>RMP</u>        |                    |                                             |
| Kurber   |                                     | <u>KKL</u>        |                    |                                             |
| Scott    |                                     | <u>AGS</u><br>AGS |                    |                                             |
| Sullivan |                                     | <u>RMP</u> for DS |                    |                                             |
| Wilson   |                                     | <u>JWW</u><br>JWW |                    |                                             |

*Special Instructions to Staff:*

\* If this column is initialed, Staff will contact the Commissioner for the statement, otherwise, dissent will simply be noted at the close of the By Direction Letter or Order.

# NATERKAQ LIGHT PLANT

APPENDIX 1

## POWER COST EQUALIZATION CALCULATION FOR THE PERIOD ENDING MARCH 31, 2017 Fuel Cost Update

|                                                  | PC10-0617M                   |                    | PC10-0617N              |
|--------------------------------------------------|------------------------------|--------------------|-------------------------|
|                                                  | Prior<br>Staff<br>Calculated | Utility<br>Request | Staff<br>Recommendation |
| A. Total KWH Generated                           | 1,551,776                    | 1,551,776          | 1,551,776               |
| B. Total KWH Sold (Appendix 2)                   | 1,380,135                    | 1,380,135          | 1,380,135               |
| C. Total Non-Fuel Costs (Appendix 2)             | \$266,121                    | \$266,121          | \$266,121               |
| <b>D. Non-Fuel Cost/KWH (C / B)</b>              | <b>\$0.1928</b>              | <b>\$0.1928</b>    | <b>\$0.1928</b>         |
| E. Total Fuel Costs (Appendix 2)                 | 348,120                      | 374,014            | 374,014                 |
| <b>F. Fuel Costs/KWH (E / B)</b>                 | <b>\$0.2522</b>              | <b>\$0.2710</b>    | <b>\$0.2710</b>         |
| G. Eligible Costs/KWH (D + F)                    | <b>\$0.4450</b>              | <b>\$0.4638</b>    | <b>\$0.4638</b>         |
| H. Eligible Cost/KWH<br>Less \$0.2003/kWh        | \$0.2447                     | \$0.2635           | \$0.2635                |
| I. Lesser of (h) or \$0.7997/kWh                 | \$0.2447                     | \$0.2635           | \$0.2635                |
| J. Average Class Rates (Appendix 3)              |                              |                    |                         |
| Residential                                      | \$0.3497                     | \$0.3497           | \$0.3497                |
| Community                                        | \$0.3497                     | \$0.3497           | \$0.3497                |
| Class Power Cost Equalization<br>Per kWh Payable |                              |                    |                         |
| K. Lesser of: (I) x 95%, or (J)                  |                              |                    |                         |
| Residential                                      | \$0.2325                     | \$0.2503           | \$0.2503                |
| Community                                        | \$0.2325                     | \$0.2503           | \$0.2503                |
| <b>L. Funding Level in Effect</b>                | <b>100%</b>                  | <b>100%</b>        | <b>100%</b>             |
| <b>Residential</b>                               | <b>\$0.2325</b>              | <b>\$0.2503</b>    | <b>\$0.2503</b>         |
| <b>Community</b>                                 | <b>\$0.2325</b>              | <b>\$0.2503</b>    | <b>\$0.2503</b>         |

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Appendix 1

# **NATERKAQ LIGHT PLANT**

APPENDIX 2

SCHEDULE OF ELIGIBLE POWER COSTS, SALES AND EFFICIENCY  
FOR THE PERIOD ENDING MARCH 31, 2017

## **Fuel Cost Update**

|                                                                  |                                                 |                 | PC10-0617M                   | PC10-0617N         |                  |
|------------------------------------------------------------------|-------------------------------------------------|-----------------|------------------------------|--------------------|------------------|
|                                                                  |                                                 |                 | Prior<br>Staff<br>Calculated | Utility<br>Request | Per<br>Staff     |
| <b>Non-Fuel Costs:</b>                                           |                                                 |                 |                              |                    |                  |
| A.                                                               | Personnel Expenses                              |                 | 137,879                      | 137,879            | 137,879          |
| B.                                                               | Operating Expenses                              |                 | 34,291                       | 34,291             | 34,291           |
| C.                                                               | General and Administrative                      |                 | 39,133                       | 39,133             | 39,133           |
| D.                                                               | Depreciation Expense                            |                 | 53,122                       | 53,122             | 53,122           |
| E.                                                               | Interest Expense                                |                 | 1,696                        | 1,696              | 1,696            |
| <b>F.</b>                                                        | <b>Total Non-Fuel Costs</b>                     |                 | <b>\$266,121</b>             | <b>\$266,121</b>   | <b>\$266,121</b> |
| Fuel Costs:                                                      |                                                 |                 |                              |                    |                  |
| G.                                                               | Gallons Consumed for<br>Electric Generation     |                 | 116,013                      | 116,013            | 116,013          |
| H.                                                               | Price of Fuel: (per gallon)<br>Weighted Average |                 | 3.0007                       | 3.2239             | \$3.2239         |
| <b>I.</b>                                                        | <b>Total Cost of Fuel (GXH)</b>                 |                 | <b>\$348,120</b>             | <b>\$374,014</b>   | <b>\$374,014</b> |
| J.                                                               | kWh Generated                                   |                 | 1,551,776                    | 1,551,776          | 1,551,776        |
| K.                                                               | kWh Sold                                        |                 | 1,380,135                    | 1,380,135          | 1,380,135        |
| L.                                                               | kWh Station Service                             |                 | 40,064                       | 40,064             | 40,064           |
| M.                                                               | Efficiency (J/G)                                | <u>Standard</u> | 13.38                        | 13.38              | 13.38            |
|                                                                  |                                                 | ≥ 12.5          |                              |                    |                  |
| N.                                                               | Line Loss                                       | ≤ 12%           | 8.48%                        | 8.48%              | 8.48%            |
| (kWh Generated - (kWh Sold + kWh Station Service))/kWh Generated |                                                 |                 |                              |                    |                  |

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Appendix 2

## Calculation of Average Class Rate per kWh

Rate Schedule: **Residential**

| (1)<br>kWh<br>by<br>Block | (2)<br>Rate<br>(\$/kWh) | (3)<br>Surcharge<br>If Applicable<br>(\$/kWh) | (4)<br>Total<br>(\$/kWh)<br>(2+3) | (5)<br>Total<br>\$<br>(1x4) | (6)<br>Avg.<br>(\$/kWh)<br>(5)/(1) | (7)<br>Avg. Rate<br>(\$/kWh) -<br>0.2003 |
|---------------------------|-------------------------|-----------------------------------------------|-----------------------------------|-----------------------------|------------------------------------|------------------------------------------|
| 500                       | 0.5500                  | 0.0000                                        | 0.5500                            | 275.00                      | 0.5500                             | 0.3497                                   |
|                           |                         |                                               |                                   |                             |                                    |                                          |
|                           |                         |                                               |                                   |                             |                                    |                                          |
|                           |                         |                                               |                                   |                             |                                    |                                          |
| 500                       |                         |                                               |                                   | 275.00                      | 0.5500                             | 0.3497                                   |
| <b>TOTAL (A)</b>          |                         |                                               |                                   |                             |                                    | <b>(E)</b>                               |

## Computation of Community Facilities Average Rate

Rate Schedule: **Community**

|         | (A)<br>Rate<br>(\$/kWh) | (B)<br>Surcharge<br>If Applicable<br>(\$/kWh) | (C)<br>Total Rate<br>(\$/kWh)<br>(A+B) | (7)<br>Avg. Rate<br>(\$/kWh) -<br>0.2003 |
|---------|-------------------------|-----------------------------------------------|----------------------------------------|------------------------------------------|
| 0 to ∞  | 0.5500                  | 0.0000                                        | 0.5500                                 | 0.3497                                   |
| Next to |                         |                                               |                                        |                                          |
| Next to |                         |                                               |                                        |                                          |
| Next to |                         |                                               |                                        |                                          |
| Next to |                         |                                               |                                        |                                          |

## Naterqak Light Plant

|                                                                                                    | Delivery Date | Gallons | Cost per Gallon | Delivery/ Mark-Up | Total Cost   |
|----------------------------------------------------------------------------------------------------|---------------|---------|-----------------|-------------------|--------------|
| Beginning Fuel Inventory                                                                           |               | 16,578  |                 |                   |              |
| Last Approved Fuel Cost/Gal.                                                                       |               |         | \$ 3.0007       |                   |              |
| Beginning Fuel Inventory in Gallons X Last Approved Fuel Cost/Gal. = Beginning Fuel Inventory Cost |               |         |                 |                   | \$ 49,746    |
| Reporting Period Purchases                                                                         | 09/30/21      | 14,478  | 3.3045          |                   | 47,843       |
|                                                                                                    | 09/29/21      | 31,378  | 3.3045          |                   | 103,689      |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
|                                                                                                    |               |         |                 |                   | -            |
| Totals for Reporting Period Purchases on this sheet:                                               |               | 45,856  |                 |                   | 151,532      |
| Grand Totals (beginning inventory plus purchases)                                                  |               | 62,434  |                 |                   | B \$ 201,278 |

Grand Total Cost divided by Grand Total Gallons = 3.2239 Weighted Avg. Cost per gallon  
Purchases: Total Cost divided by Grand Total Gallons = 3.3045 Weighted Avg. Cost per gallon

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